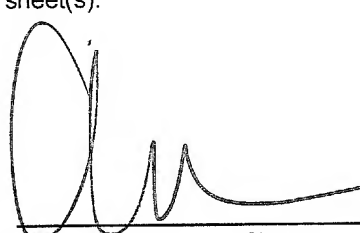


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PTO/SB/33 (07-05)

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PRE-APPEAL BRIEF REQUEST FOR REVIEW		Docket Number (Optional) 9314-58	
<p>II hereby certify that this correspondence is being transmitted via the Office electronic filing system in accordance with § 1.6(a)(4) to the U.S. Patent and Trademark Office on <u>July 17, 2007</u></p> <p>Signature <u>Candi L. Riggs</u></p> <p>Typed or printed name <u>Candi L. Riggs</u></p>		Application Number 10/743,670	Filed 12/22/03
		First Named Inventor Matt Murray	
		Art Unit 2618	Examiner Pan, Yuwen
<p>Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.</p> <p>This request is being filed with a notice of appeal.</p> <p>The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided.</p> <div style="display: flex; justify-content: space-between; align-items: flex-start; margin-top: 20px;"><div style="width: 45%;"><p>I am the</p><p><input type="checkbox"/> applicant/inventor.</p><p><input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)</p><p><input checked="" type="checkbox"/> attorney or agent of record. 48,568 Registration number _____</p><p><input type="checkbox"/> attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34 _____</p></div><div style="width: 50%; text-align: center;"> _____ Signature Elizabeth A. Stanek _____ Typed or printed name 919-854-1400 _____ Telephone number July 17, 2007 _____ Date</div></div> <p style="font-size: small; margin-top: 20px;">NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.</p>			
<p><input checked="" type="checkbox"/> *Total of <u>1</u> forms are submitted.</p>			

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re: Matt Murray

Confirmation No.: 7610

Serial No.: 10/743,670

Group Art Unit: 2618

Filed: December 22, 2003

Examiner: Pan, Yuwen

For: **MULTI-MODE AUDIO PROCESSORS AND METHODS OF OPERATING
THE SAME**

Date: July 17, 2007

Mail Stop AF

Commissioner for Patents

Box 1450

Alexandria, VA 22313-1450

**REASONS IN SUPPORT OF APPLICANT'S PRE-APPEAL
BRIEF REQUEST FOR REVIEW**

Sir:

This document is submitted in support of the Pre-Appeal Brief Request for Review filed concurrently with a Notice of Appeal in compliance with 37 C.F.R. 41.31 and with the rules set out in the OG of July 12, 2005 for the New Appeal Brief Conference Pilot Program, which was extended until further notice on January 10, 2006.

No fee or extension of time is believed due for this request beyond those requested in papers associated herewith. However, if any fee or extension of time for this request is required, Applicant requests that this be considered a petition therefore. The Commissioner is hereby authorized to charge any additional fee, which may be required, or credit any refund, to our Deposit Account No. 50-0220.

REMARKS

Applicant hereby requests a Pre-Appeal Brief Review (hereinafter "Request") of the claims finally rejected in the Final Office Action of April 17, 2007 (hereinafter "Final Action") and the Advisory Action mailed July 3, 2007 (hereinafter "Advisory Action"). The Request is provided herewith in accordance with the rules set out in the OG dated July 12, 2005.

Claims 6-9 and 12-15 stand rejected under 35 U.S.C. §102(e) as being anticipated by United States Patent Application Publication No. 2004/0063456 to Griffin (hereinafter "Griffin"). *See* Final Action, page 3. Claims 10 and 16 stand rejected under 35 U.S.C. §103 as being unpatentable over Griffin in view of United States Patent No. 5,046,103 to Warnaka (hereinafter "Warnaka"). *See* Final Action, page 4. Claims 11 and 17 stand rejected under 35 U.S.C. §103 as being unpatentable over Griffin and Warnaka in further view of United States Patent No. 5,251,262 to Suzuki (hereinafter "Suzuki"). *See* Final Action, page 5. Applicant respectfully submits that many of the recitations of the pending claims are not met by the cited references for at least the reasons discussed herein and in Applicant's previously filed

After Final of June 18, 2007. Furthermore, Applicant submits that the Office Action of November 28, 2006, the Final Action and/or the Advisory Action have not shown that the claims are anticipated and/or obvious in view of the cited references. Therefore, Applicant respectfully requests review of the present application by an appeal conference prior to the filing of an appeal brief. In the interest of brevity and without waiving the right to argue additional grounds should this Petition be denied, Applicant will only discuss the recitations of the independent Claims 6 and 12.

Independent Claim 6 recites:

A mobile terminal comprising:
a housing;
a microphone positioned in the housing;
a speaker positioned in the housing remote from the microphone; and
a multi-mode audio processor circuit configured to apply noise cancellation to first and second microphone inputs thereof, the first microphone input being coupled to the microphone and the second microphone input being coupled to the speaker,
wherein the speaker comprises a transducer and wherein the multi-mode audio processor circuit is configured to transmit sound from the transducer in a first mode of operation and to generate a composite audio signal from sound energy received by the microphone and the transducer in a second mode of operation.

Applicant submits that at least the highlighted recitations of independent Claim 6 are neither disclosed nor suggested by Griffin for at least the reasons discussed herein.

In particular, the Final Action points to a microphone 14d and a speaker 14a of Figure 4 of Griffin as providing the teachings of the microphone and speaker as recited in independent Claim 6. *See* Final Action, page 3. Applicant respectfully disagrees. In particular, Griffin discusses first and second communication modules configured to communicate so as to allow, for example, hands-free operation of one of the communication modules. *See* Griffin, Abstract. Figure 4 of Griffin illustrates a communication module configured to be received in a user's ear for hands-free operation of a second communication module. *See* Griffin, paragraph 32. As discussed in Griffin, the microphone 14d may pick up more than the user's voice, thus, some embodiments of Griffin may provide a noise cancellation circuit to filter out background noise, *i.e.*, noise other than the user's voice. *See* Griffin, paragraph 33. Devices for and methods of noise cancellation are not new.

In stark contrast, Claim 6 recites:

wherein the speaker comprises a transducer and wherein the multi-mode audio processor circuit is configured to transmit sound from the transducer in a first mode of operation and to generate a composite audio signal from sound energy received by the microphone and the transducer in a second mode of operation.

In other words, the speaker (transducer) operates in two modes, a first mode where the transducer is configured to transmit noise and a second mode where the transducer is configured to operate in combination with the microphone to generate noise. Thus, as discussed in the specification of the present application:

...portable electronic devices including multi-mode audio processors according to embodiments of the present invention **may apply two-microphone noise cancellation or other audio signal processing algorithms without providing two physical microphones in the housing of the portable electronic device.**

See Specification, page 4, lines 29-33 (emphasis added). Nothing in the cited portion of Griffin discloses or suggests the recitations of Claim 6 as set out above for at least these reasons. Griffin merely discusses a hands-free system having a microphone and a speaker and may have noise cancellation capability to filter out background noise inadvertently received by the microphone. Accordingly, Applicant respectfully submits that Claim 6 and the claims that depend therefrom are patentable over Griffin for at least the reasons discussed herein.

Furthermore, independent Claim 12 recites:

A mobile terminal comprising a multi-mode audio processor circuit operatively associated with a transducer, **the multi-mode audio processor circuit being configured to operate the transducer as a speaker during a first mode of operation and a microphone during a second mode of operation.**

Applicant respectfully submits that at least the highlighted recitations of Claim 12 are neither disclosed nor suggested by Griffin for at least the reasons discussed herein. The Final Action points to the same portions of Griffin cited as teaching the recitations of Claim 6 as teaching the recitations of Claim 12. See Final Action, page 4. Thus, Applicant submits that independent Claim 12 is patentable over Griffin for at least the reasons discussed above with respect to Claim 6. Furthermore, as discussed above, Griffin discusses a hands-free system having a microphone and a speaker and may have noise cancellation capability to filter out background noise inadvertently received by the microphone. Nothing in Griffin discloses or suggests a transducer that operates as both a speaker and a microphone as recited in independent Claim 12. Accordingly, Applicant submits that independent Claim 12 and the claims that depend therefrom are patentable over Griffin for at least the reasons discussed herein.

Responsive to Applicant's arguments, the Final Action states:

The examiner believes that applicant tries to claim a mobile terminal has a speaker with a microphone for picking up noise and another microphone for picking up the voice energy from a user. During the first mode in which a speaker operation mode, the

microphone for picking up noise is turned off (see page 13, lines 15-20). Thus, the microphone for picking up noise is not used during the first mode. During the second mode in which is mic. mode wherein both microphones are operation for optimizing the receiving of human voice. From examiner point of view, it is basic a process of noise cancellation for the mic. mode. So the Griffin reference clearly teaches a wireless device comprising a speaker (item 14a) with a noise microphone (item 48) and another microphone (14d) for human voice. Based on the structure, it is clear that the speaker is utilized for alerting user for incoming all or voice communication from another end as the first mode. The association of microphone and noise microphone are clearly taught in paragraph 33 in which to provide a higher quality speech signal from the user end. In addition, since the applicant does not claim "without two microphones" (see applicant's remark, page 8), the argument regarding to this feature is moot. Therefore, based on the foregoing reasoning, the previous rejection is maintained.

See Final Action, page 2 (emphasis added). Applicant respectfully disagrees with the Examiner's point of view as set out above.

In particular, the Final Action points to page 13, lines 15-20 of the specification of the present application to support the statements in the Final Action. The entire paragraph of the specification from which this citation is taken states:

If voice activity is detected (block 540) above a certain threshold at the microphone, the speaker/microphone may be configured to operate as a microphone (block 550). Sound energy may be received at the microphone and the speaker/microphone in the second mode of operation. It will be understood that the microphone and speaker/microphone (first and second transducers) may receive the sound energy created by, for example, a human voice, at different times and with different amplitudes, as one of the transducers may be positioned closer to the source of the sound energy, for example, a user's mouth. A multi-mode audio processor circuit may receive the sound energy from the first and second transducers at first and second microphone inputs, respectively, and combine first and second audio signals produced from the sound energy received by the first and second transducers, respectively, in the second mode of operation (block 560). A single noise-attenuated audio signal may be generated based on the combined first and second audio signals (block 570). On the other hand, when voice activity is not detected at the microphone (block 540), the speaker/microphone may operate as a speaker in the first mode of operation (block 545) and the path of the microphone may be disabled until voice activity is detected.

See Specification, page 13, lines 5-21 (emphasis added). In other words, the speaker/microphone is a single physical device that operates as a microphone in one mode of operation and as a speaker in another mode.

Thus, referring to the recitations of Claim 6, set out above, the transducer operates as speaker in the first mode of operation and microphone in the second mode of operation. Independent Claim 12 contains similar recitations (configured to operate the transducer as a speaker during a first mode of operation and a microphone during a second mode of operation). Providing a single device that provides two operations may allow the device in

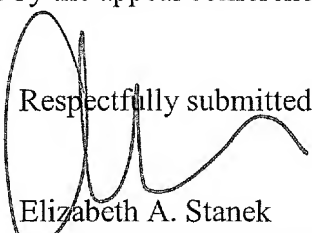
which the speaker/microphone is included to be made smaller according to some embodiments of the present invention.

In stark contrast, **the Final Action points to two devices as providing the teachings of the single speaker/microphone (transducer) as recited in Claim 6 of the present application.** In particular, the Final Action points to a microphone 14d and a speaker 14a of Figure 4 of Griffin as providing the teachings of the microphone/speaker device as recited in independent Claim 6. *See* Final Action, page 2. The provision of a microphone 14d and a speaker 14a in Griffin used in combination with a background noise microphone 48 of Griffin, **does not provide a device with dual modality (speaker and microphone) as recited in independent Claims 6 and 12 of the present application.** Accordingly, Applicants respectfully submit that Claims 6-17 are patentable over Griffin for at least these additional reasons.

The Advisory Action states that because the microphone 14d and the speaker 14d of Griffin are in "a single physical house/device", Griffin teaches "a device with dual modality as recited in independent claims 6 and 12 of the present application." *See* Advisory Action, Continuation Sheet. Applicant respectfully submits that the provision of a microphone and a speaker in a single housing does not teach a device with dual modality (speaker and microphone) as recited in independent Claims 6 and 12 of the present application.

Accordingly, for at least these reasons, Applicant respectfully submits that the Office Actions fail to show that the claims of the present application are anticipated and/or obvious in view of the cited references and, therefore, requests that the present application be reviewed and that the rejections be reversed by the appeal conference prior to the filing of an appeal brief.


Respectfully submitted,


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CERTIFICATION OF TRANSMISSION

I hereby certify that this correspondence is being transmitted via the Office electronic filing system in accordance with § 1.6(a)(4) to the U.S. Patent and Trademark Office on July 17, 2007.


Candi R. Rizzo